

US EPA OECA AIR INSPECTION REPORT

Inspection Dates: September 26 – 30, 2016 Type of inspection: Clean Air Act, Partial Compliance Evaluation Company Name: Blue Ridge Mountain Resources (fka Triad Hunter, LLC.) Facility Names: Marcellus Shale Oil and Gas Production Sites Physical Location: 125 Putnam Street, Marietta, Ohio 45750 Sites: Tyler County, WV Mailing Address: Main Office: 125 Putnam Street Marietta, Ohio 45750 County/Parish: **Tyler County** Reg. Programs: SIP, NSPS OOOOa SIC Code: 1311, 1321 Facility Representatives: Rick Walton EHS Manager Kelbee Stifflemire Production Manager Derek Higgins **Production Foreman** Will Harlis Supervisor of Regulatory Operations **EPA Inspectors**: Stephen Rieck **Environmental Scientist** 404-562-9177 Nikki Radford **Environmental Specialist** 404-562-9099 **EPA** Inspector: Stephen Rieck (Date) **EPA** Inspector:

Nikki Radford

(Date)

Summary

This inspection report is comprised of two sections:

- Section I Introduction includes the following topics:
 - o Purpose of the Inspection,
 - o Facility Description
- Section II Observations

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

On September 19, 2017, Nikki Radford and Stephen Rieck met with staff of Blue Ridge Mountain Resources (BRM Resources). The inspection team presented credentials and described the purpose of the inspection.

The inspection objective was to visit as many multi-well production facilities as practical. Through FLIR camera optical gas imaging and photoionization detection (PID), the inspection team surveyed the extent of excess VOC emissions from storage tanks, valves, combustors, gas processing units, and other process equipment.

FACILITY DESCRIPTION

BRM Resources' multi-well production facilities have storage tanks and other equipment that process the natural gas and liquids, including produced water, from multiple wells. The facilities have gas processing units (GPUs) that operate as separators, heater-treaters, and flares or combustors for control. The tanks contain liquid condensates and produced water.

Section II – OBSERVATIONS

We conducted our ground-level emissions surveys using the following equipment:

- IR camera manufactured by FLIR, Model GF320.
- PID manufactured by Ion Science called the "PhoCheck TIGER." NOTE: PIDs cannot measure methane or ethane, readings with the PID are significantly lower than the actual VOC concentration.
- QRAE III personal safety monitors

Sites owned BRM Resources and inspected by EPA (Note: Site names are based on property ownership)

Site Name(s)	Roger Weese
Lat/Long	39.42479 / -80.82488
Date/Time	09/19/17 @ 9:30 am
Equipment	4 wells, 4 GPUS, 2 tanks, 1 combustor
FLIR MOV_	_0324 – emissions from GPU box 11-100325 – Video taken at compressor
	house.

Notes	GPU emissions noted from level control box. Emissions from level control box
	are common across industry. No emissions noted from combustor. See production
	data below.

Site Name(s)	Everett Weese
Lat/Long	39.425 / -80.809177
Date/Time	09/19/17 @ 10:24 am
Equipment	5 wells, 5 GPUS, 6 tanks, 3 combustors (2 in use)
FLIR MOV_	_0326 – emissions from Enardo thief hatch on tank 1-C0327 – some emissions
	noted on combustor.
Notes	Production (Roger Weese and Everett Weese sites combined):
	9.5 mmcf gas/day
	5 bbls oil/day
	100 bbls produced water/day

Site Name(s)	Spencer Collins
Lat/Long	39.50136 / -80.907
Date/Time	09/19/17 @ 12:56 pm
Equipment	8 wells (on two separate well pads), 8 GPUS, 10 tanks, 1 combustor, 1 dehydration unit.
FLIR MOV_	_0328 – emissions from Enardo thief hatch on tank Spencer 20329 – emissions from Enardo thief hatch on tank Collins 30330 – tanks from ground0331 – tagged leaks on compressor.
Notes	LDAR at this site was conducted a few days before inspection. Recent sealing around thief hatches noted. Emissions from thief hatch on Spencer 2 and Collins 3 read 200 ppm on the PID. NOTE: since the PID cannot measure methane or ethane, and since emssions were visible on FLIR, the actual VOC concentration would be closer to 10,000 ppm.
	Production: 9.0 mmcf gas/day 20 bbls oil/day 70 bbls produced water/day

Site Name(s)	Stewart Windland
Lat/Long	39.46335 / -80.91311
Date/Time	09/19/17 @ 2:28 pm
Equipment	4 wells, 4 GPUS, 4 Tanks, 4 Combustors
FLIR MOV_	No video taken
Notes	Production:
	7.5 mmcf gas/day
	28 bbls oil/day
	75 bbls produced water/day